

The years of highest and lowest mean temperature are shown in Table I of the REVIEW for August, 1894. The mean temperature for August, 1895, was the highest on record at Nantucket, 68.8; Philadelphia, 77.4; Harrisburg, 75.0; Pittsburgh, 74.5; Parkersburg, 76.2; Columbus, Ohio, 75.6; Green Bay, 68.4; Milwaukee, 71.6; Jacksonville, 82.9; Palestine, 82.3. It was the lowest on record at Tatoosh Island, 54.6; Neah Bay, 57.4; Eureka, 54.0; Carson City, 65.2; Fresno, 80.6.

The maximum and minimum temperatures of the current year are given in Table I. The highest maxima were: Yuma, 114 (5th); Fresno, 110 (5th); Red Bluff, 107 (4th); Fort Smith, 106 (21st); Walla Walla, 102 (2d); Huron, 13th, Concordia, 27th, and Abilene, 14th, 100. The lowest maxima were: Eureka, 66 (5th); Tatoosh Island, 70 (29th). The highest minimum was: Corpus Christi, 73 (2d). The lowest minima were: St. Vincent, Bismarck, and Port Crescent, 32 on the 20th, 21st, and 26th, respectively.

The years of highest maximum and lowest minimum temperatures are given in the last four columns of Table I of the current REVIEW. During the present month the maximum temperatures were the highest on record at: Harrisburg, 95; Parkersburg, 96; Charleston, 98; Jupiter, 93; Port Angeles, 88; Carson City, 95. The minimum temperatures were the lowest on record at: Harrisburg, 50; Bismarck, 32; Williston and Havre, 34; Neah Bay, 40; Port Angeles and Seattle, 38; Fort Canby, 48; Astoria and Eureka, 45; Carson City, 34; Fresno, 51; San Diego, 54.

The greatest daily range of temperature and the extreme monthly range are given for each of the regular Weather Bureau stations in Table I, which also gives data from which may be computed the extreme monthly ranges for each station. The largest values among the greatest daily ranges were: Havre, 51; Idaho Falls, 50; Baker City and Lander, 49. The smallest values were: Block Island and Hatteras, 14; Port Eads and Galveston, 15; Nantucket and Jupiter, 16; Kittyhawk, Key West, and San Diego, 17. Among the extreme monthly ranges the largest values were: Bismarck, 66; Huron, 63; Havre and Williston, 62; Carson City, 61; Pierre, 60. The smallest values were: Hatteras, 19; Corpus Christi, Port Eads, and Key West, 20.

The accumulated monthly departures from normal temperatures from January 1 to the end of the current month are given in the second column of the following table, and the average departures are given in the third column, for comparison with the departures of current conditions of vegetation from the normal conditions.

Districts.	Accumulated departures.		Districts.	Accumulated departures.	
	Total.	Average.		Total.	Average.
Upper Lake	+ 0.7	+ 0.1	New England.....	- 2.3	- 0.3
North Dakota	+ 4.7	+ 0.6	Middle Atlantic.....	-10.1	- 1.3
Missouri Valley	+ 1.1	+ 0.2	South Atlantic	-16.9	- 2.1
Northern Plateau.....	+ 5.0	+ 0.6	Florida Peninsula.....	-18.0	- 1.6
			East Gulf.....	-18.7	- 2.3
			West Gulf.....	-17.7	- 2.2
			Ohio Valley and Tenn.....	-18.3	- 1.7
			Lower Lake.....	- 5.5	- 0.7
			Upper Mississippi.....	- 2.1	- 0.3
			Northern Slope.....	- 9.9	- 1.2
			Middle Slope.....	- 7.8	- 1.0
			Southern Slope (Abilene).....	-18.9	- 2.4
			Southern Plateau.....	- 9.0	- 1.1
			Middle Plateau.....	- 9.3	- 1.2
			North Pacific.....	- 0.5	- 0.0
			Middle Pacific.....	- 2.7	- 0.3
			South Pacific.....	- 6.7	- 0.8

MOISTURE.

The quantity of moisture in the atmosphere at any time may be expressed by means of the weight contained in a cubic foot of air, or by the tension or pressure of the vapor, or by

the temperature of the dew-point. The mean dew-points for each station of the Weather Bureau, as deduced from observations made at 8 a. m. and 8 p. m., daily, are given in Table I.

The rate of evaporation from a special surface of water on muslin at any moment determines the temperature of the wet-bulb thermometer, but a properly constructed evaporimeter may be made to give the quantity of water evaporated from a similar surface during any interval of time. Such an evaporimeter, therefore, would sum up or integrate the effect of those influences that determine the temperature as given by the wet bulb; from this quantity the average humidity of the air during any given interval of time may be deduced.

The sensible temperature experienced by the human body and attributed to the atmosphere depends not merely upon the temperature of the air, but equally upon the dryness, the velocity of the wind, and the suddenness of atmospheric changes. The temperature of the wet-bulb thermometer as obtained by the whirling apparatus used in the shaded shelter corresponds to the temperature felt by persons standing in the shade of trees or houses, exposed to a natural breeze of at least 6 miles per hour. This temperature and its depression below the dry bulb are the fundamental data for all investigations into the relations between human physiology and the climate. In order to present a monthly summary of the atmospheric conditions from a hygienic and physiological point of view, Table VIII has been prepared, showing the maximum, minimum, and mean readings of the wet-bulb thermometer at 8 a. m. and 8 p. m., seventy-fifth meridian time.

PRECIPITATION.

[In inches and hundredths.]

The distribution of precipitation for the month of August, 1895, as determined by reports from about 2,500 stations, is exhibited on Chart III. The numerical details are given in Tables I, II, and III.

The precipitation for the current month was heaviest, 5 to 14 inches, on the Gulf Coast from Louisiana to Florida, and the interior of Georgia and South Carolina, but least, namely zero, on the coast and central parts of California.

The diurnal variation is shown by Table XII, which gives the total precipitation for each hour of seventy-fifth meridian time, as deduced from self-registering gauges kept at about 43 regular stations of the Weather Bureau; of these 37 are float gauges and 6 are weighing gauges.

The normal precipitation for each month is shown in the Atlas of Bulletin C, entitled "Rainfall and Snow of the United States, compiled to the end of 1891, with annual, seasonal, monthly, and other charts."

The current departures from the normal precipitation are given in Table I, which shows that precipitation was in excess in the St. Lawrence Valley, the east Gulf States, Georgia, and a small portion of Missouri, Kansas, Nebraska, and Iowa. Elsewhere it was generally deficient. Large excesses were: Montreal, 4.8; Wichita and Atlanta, 4.0; Omaha and Columbia, 3.8; Augusta, 3.7; Chicago, 3.5. The large deficits were: Kittyhawk, 4.5; Philadelphia, 4.2; Jacksonville, 4.1; Raleigh, 4.0; Norfolk, 3.8.

The average departure for each district is also given in Table I. By dividing these by the respective normals the following corresponding percentages are obtained (precipitation is in excess when the percentages of the normal exceed 100):

Above the normal: East Gulf, 122; lower Lake, 110; Missouri Valley, 117; middle Slope, 120; southern Plateau, 112. Normal: Middle Pacific, 100.

Below the normal: New England, 91; Middle Atlantic, 55; South Atlantic, 88; Florida Peninsula, 90; west Gulf, 75; Ohio Valley and Tennessee, 58; upper Lake, 94; North Dakota, 63; upper Mississippi, 81; northern Slope, 63; Abilene